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DEP'S REP



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re application of: Miland Moreshwar GHARPURE, et al.

Serial No.: 10/541,473

Filed: January 19, 2006

Group No.: N/A

Examiner: N/A

PATENT MAINTENANCE  
DIVISION  
PATENT

MAR 28 PM 4:05

US PATENT & TRADEMARK  
OFFICE

For: A PROCESS FOR THE MANUFACTURE OF CEFPODOXIME PROXETIL

Attorney Docket No.: U 015837-4

Commissioner for Patents  
P.O. BOX 1450  
Alexandria, Va. 22313

REFUND COMPLETED  
PCT NATIONAL DIVISION

Sir:

REQUEST FOR REFUND

Deposit Account 12-0425 was charged \$360.00 for claims - multiple dependent (Fee Code 1616) on January 24, 2006 (Posting Ref Txt No. 10541473).

However, a Preliminary Amendment for the multiple-dependent claims was filed upon Completion of the Filing Requirements on January 19, 2006. A copy of the Preliminary Amendment is attached to show this.

Refund of the \$360.00 by credit to Deposit Account 12-0425 is requested.

Respectfully submitted,

Janet I. Cord  
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Tel.No.(212) 708-1935

CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. BOX 1450, Alexandria, Va. 22313

Date: March 22 2006

Janet I. Cord  
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- \$130 Surcharge.
- Total additional claim fee(s) for this application is \$ 360
- \$360 for multiple dependent claim surcharge.

10/541473  
 Rec'd PCT/PTO 19 JAN 2006

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

CHARITTA A BURT

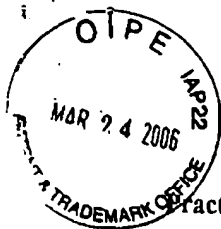
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**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/541,473	PCT/IN03/00003	U 015837-4

FORM PCT/DO/EO/905 (371 Formalities Notice)

Adjustment date: 10/03/2006 THOLLAND  
 01/24/2006 AIKANI 00000161 120425 10541473  
 02 FC:1616 360.00 CR



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Practitioner's Docket No. U 015837-4

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PATENT TRADEMARK OFFICE

CHAPTER II

TRANSMITTAL LETTER  
TO THE UNITED STATES ELECTED OFFICE (EO/US)  
(ENTRY INTO U.S. NATIONAL PHASE UNDER CHAPTER II)

INTERNATIONAL APPLICATION NO. PCT/ <del>1</del> 2003/000003	INTERNATIONAL FILING DATE 6 JANUARY 2003	PRIORITY DATE CLAIMED
TITLE OF INVENTION A PROCESS FOR THE MANUFACTURE OF CEFPODOXIME PROXETIL		
APPLICANT(S)		

1. GHARPURE, Milind Moreshwar
2. DESHMUKH, Sanjay, Shankar
3. MAHALE, Rajendra, Dagesing

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PATENT TRADEMARK OFFICE

ATTENTION: EO/US

PRELIMINARY AMENDMENT

Please amend the above identified application as follows:

CERTIFICATION UNDER 37 C.F.R. 1.10\*

(Express Mail label number is mandatory.)  
(Express Mail certification is optional.)

I hereby certify that this paper, along with any document referred to, is being deposited with the United States Postal Service on this date January 19, 2006, in an envelope as Express Mail Post Office to Addressee," mailing Label Number EV 480 463 005 US, addressed to the: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

GERALDINE MARTI

(type or print name of person mailing paper)

*Geraldine Marti*

Signature of person mailing paper

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Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

**\*WARNING:**

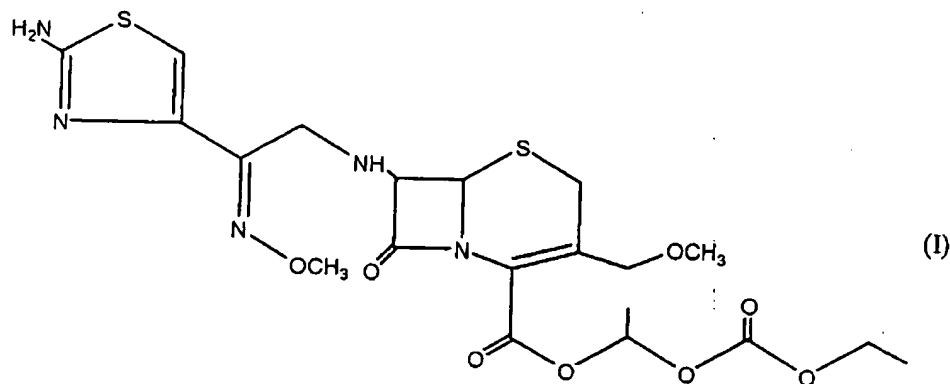
Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care."

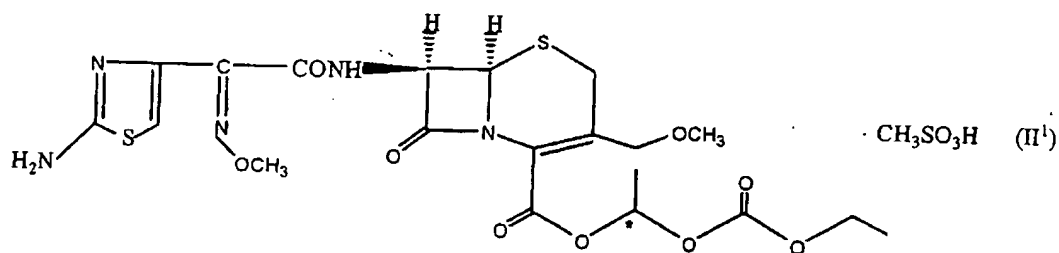
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## IN THE CLAIMS

1. (Currently Amended) A process for obtaining cefpodoxime proxetil of formula (I), of high purity conforming to pharmacopoeial specification comprising;



addition of adding a solution of methanesulfonic acid in water to a solution of impure cefpodoxime proxetil of formula (I) in an organic solvent to form the corresponding cefpodoxime proxetil methanesulfonate of formula (II<sup>1</sup>) [I,];

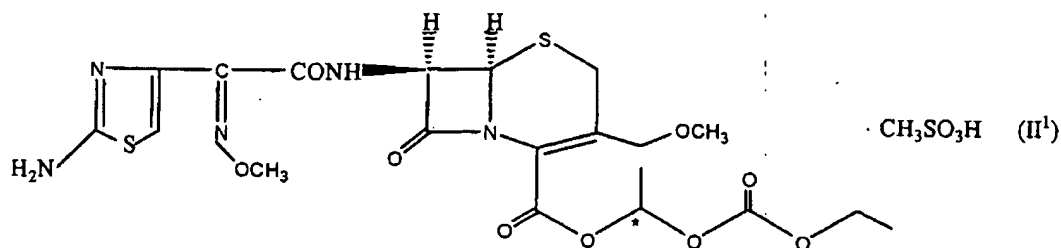


followed by ~~addition of~~ adding a co-solvent and ~~separation~~ separating of the aqueous phase containing comprising cefpodoxime proxetil methanesulfonate of formula (II<sup>1</sup>) having a diastereomeric ratio of (R/R+S) between 0.5 to 0.6; and subsequent neutralization of neutralizing the ~~methanesulfonate~~ methanesulfonate salt (II<sup>1</sup>) with a base to give cefpodoxime proxetil (I) free of impurities and having a diastereomeric ratio of (R/R+S) between 0.5 to 0.6 or,

~~addition~~ adding of impure cefpodoxime proxetil of formula (I) to a solution of

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methanesulfonate of formula (II<sup>1</sup>) in water,



2. (Original) A process as claimed in claim 1, wherein said pure cefpodoxime proxetil is dissolved in a water-miscible organic solvent, followed by optional treatment of the solution with activated charcoal, followed by filtration through a filter aid to remove charcoal and suspended particles and addition of water to the filtrate to precipitate out cefpodoxime proxetil (I) free of impurities and having a diastereomeric ratio of (R/R+S) between 0.5 to 0.6, which can be isolated by filtration.
3. (Currently Amended) A process as claimed in claim 1 or 2, wherein said first organic solvent is a water-immiscible solvent.
4. (Currently Amended) A process as claimed in Claim 3, wherein the water-immiscible organic solvent is selected from the group consisting of methyl acetate, ethyl acetate, butyl acetate, methyl ethyl ketone and methyl iso-butyl ketone.
5. (Currently Amended) A process as claimed in ~~any preceding claim 1~~, wherein the co-solvent is selected from the group consisting of an aliphatic hydrocarbon, aromatic hydrocarbon and an ether.
6. (Currently Amended) A process as claimed in Claim 5, wherein the aliphatic

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14. (Currently Amended) A process as claimed in ~~any preceding~~ claim 1, wherein the pure cefpodoxime proxetil of formula (I) after neutralization with a base is isolated by filtration.
15. (Currently Amended) A process as claimed in ~~any preceding~~ claim 1, wherein the diastereomeric ratio of (R/R+S) pure cefpodoxime proxetil of formula (I) is between 0.5 to 0.6.
16. (Currently Amended) A process as claimed in ~~any one of claims~~ claim 3 to 15, wherein the water-miscible organic solvent is selected from the group consisting of lower alcohols ~~such as methanol, ethanol and isopropanol~~; lower alkyl ketones ~~such as acetone~~; lower alkyl glycols ethers ~~such as methyl glycol~~; dipolar aprotic solvents ~~such as N,N-dimethylacetamide and dimethyl sulfoxide~~ and cyclic ethers ~~such as tetrahydrofuran and dioxane~~.
17. (Cancelled)
18. (New) A process as claimed in claim 9, wherein said methanesulfonic acid is employed in a molar ratio of between 1.0 to 2.0 mole equivalent of cefpodoxime proxetil, preferably between 1.5 to 2.0 mole equivalent.
19. (New) The process according to claim 16, wherein the lower alcohol is selected from the group consisting of methanol, ethanol and isopropanol.
20. (New) The process according to claim 16, wherein the lower alkyl ketone is acetone.

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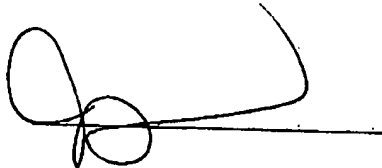
21. (New) The process according to claim 16, wherein the lower alkyl glycol ether is methyl glycol.
22. (New) The process according to claim 16, wherein the dipolar aprotic solvent is selected from the group consisting of N,N-dimethylacetamide and dimethyl sulfoxide.
23. (New) The process according to claim 16, wherein the cyclic ether is selected from the group consisting of tetrahydrofuran and dioxane.

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REMARKS

The above amendatory action taken is solely for the purpose of avoiding claim fees that would otherwise accrue due to the presence of multiple dependent claims.

Respectfully submitted,

A handwritten signature in black ink, appearing to be "Janet I. Cord", written over a horizontal line.

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